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AUTHOR Takai, Ricky; Fetters, William
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ABSTRACT

The results of a national longitudiral survey on the language proficiency of bilingual Hispanic American high school students are reported. Graphs and tables display language proficiency data for sophomores and seniors, language background data by ethnic origin, and family and educational background data by proficiency level. The survey addressed the following questions: language spoken as a child, language currently used at home, family background, relative proficiency in English and Spanish, academic achievement, educational aspirations, and amount of bilingual instruction received. Of the Hispanic students, 40 percent had an entirely English speaking background. Among the remaining 60 percent with a Spanish language background, the findings reveal that (1) Spanish is spoken in most of their homes, (2) they have a lower socioeconomic status than the other groups surveyed, (3) they rank lower on academic achievement and aspirations, (4) the majority of the students do not report themselves to be more proficient in Spanish than English, and (5) the Spanish-dominant students more often received bilingual instruction. (RW)

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Ricky Takai & William Fetters
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LANGUAGE PROFICIENCY OF HISPANIC HIGH SCHOOL STUDENTS: DESCRIPTIVE PROFILE

Language skills are important influences on the attainment and performance of minority and disadvantaged groups. Policy debates concerning bilingual - bicultural education focus on the difficulties faced by students with limited-English speaking ability when enrolled in school systems where English is the dominant language. For Hispanic students, the role of a bilingual background is central in discussions of attainment and performance.

Data from High School and Beyond (HS&B), a national longitudinal survey sponsored by the National Center for Education Statistics, will contribute significantly to the study of Hispanic students with bilingual backgrounds. The sample was designed to include a sufficient number of Hispanic students to permit reliable statements about Hispanics. For the purposes of this bulletin, all students were classified by origin/descent as: Hispanic, non-Hispanic, and Unspecified. The survey instruments included questions about language background, proficiency in English and Spanish, family background, schooling experiences, cognitive test performance, and educational aspirations.[1]

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[1] Percentage distribution of the Hispanic student population by subgroups was: Mexican (53 percent of sophomores and 54 percent of seniors), Cuban (6 percent of sophomores and seniors), Puerto Rican (14 percent of sophomores and 10 percent of seniors), and Other Latin American (27 percent of sophomores and 30 percent of seniors).

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NCES 82-246b

LANGUAGE BACKGROUNDS OF HISPANIC STUDENTS

Table 1 compares the three origin/descent groups with respect to language background.[2] Hispanic students are further divided into four groups: Mexican, Puerto Rican, Cuban, and Other Latin American. Percentage distributions are presented for sophomore and senior origin/descent groups.[3]

Table 1 shows that although the majority of Hispanic students had a Spanish language background (59 percent of sophomores and 63 percent of seniors), a substantial minority had strictly a English-language background (39 percent of sophomores and 35 percent of seniors). The proportion of Other Latin Americans with a Spanish language background, however, was less than half that of the other three Hispanic subgroups (roughly 35 percent versus 70 percent). Very few non-Hispanic or unspecified descent students had a Spanish language background (less than 2 percent and 5 percent, respectively).

SPANISH-LANGUAGE BACKGROUND PATTERNS

This section focuses on only the students with a Spanish language background. Table 2 compares Spanish language background students with regard to the five indicators of Spanish language background. The four Hispanic subgroups are compared with one another, and with the non-Hispanic and unspecified descent groups.

First Language Spoken As Child

For about 55 percent of Hispanics students with a Spanish language background, Spanish was the first language spoken as a child -- as compared with less than 10 percent for non-Hispanic and about one-third for unspecified origin students. This statistic varied greatly among Hispanic subgroups, from about 85 percent for Puerto Ricans to about 75 percent for Cubans, to only about 50 percent for Mexicans and Other Latin Americans.

First Language or One of the Languages Spoken As A Child

For Hispanic students with a Spanish language background, almost 80 percent spoke Spanish as a child (either as the first language or one of the languages spoken) versus only about one-third of non-Hispanic and about 50-60 percent of unspecified origin students. The remaining 20 percent of Hispanic students

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[2] All students were classified by language background as: Spanish, other foreign language, or English. See "Ethnicity and Language Classifications" for further discussion of the classification.

[3] All differences cited in this bulletin are significant at the 95 percent level of confidence (two-tailed test). See "Limitations of the Data" for further discussion of the calculation of standard errors.

with a Spanish language background indicated that they did not speak Spanish as a child but Spanish was spoken in the home. Among the Hispanic subgroups, the percent varied from about 96 percent for Puerto Ricans to about 90 percent for Cubans to about 70 percent for Mexicans and Other Latin Americans students.

Current Language Used and Spoken in Home

Although approximately 12 percent of Hispanics students with a Spanish language background now usually speak Spanish, Spanish currently is spoken in about 95 percent of their homes. The corresponding percentages for non-Hispanic students with a Spanish language background are 6 percent and 75 percent, respectively, and those for unspecified origin students about 9 percent and almost 90 percent, respectively. The latter figures suggest that many of those who did not indicate their ethnic origin, but who did indicate their Spanish language background, actually were Hispanics.

Within the Hispanic Spanish language background population, the percent of students who now usually speak Spanish is highest for Puerto Ricans (about 20 percent). Spanish is currently spoken in 90 percent of the homes of the four Hispanic subgroups.

FAMILY BACKGROUND AND SCHOOL OUTCOMES

Table 3 compares the three language background groups (Spanish, other foreign language, and English) with respect to family background and school outcomes. It should be remembered that about 40 percent of Hispanic students did not have a Spanish language background. These Hispanic students are included in the "Other foreign language" and English language categories.

Family Background

Hispanic students with a Spanish language background show a lower percent born in the U. S. (about 75 percent) than is true for non-Hispanic (about 95 percent) or origin unspecified (about 80 percent) students (table 3). A similar situation is found for place of birth of the student's mother.

Hispanic students with a Spanish language background are much lower in socioeconomic status (SES) than any other group. The contrast with non-Hispanics is the most striking. Slightly over 40 percent of Hispanic students were in the top three SES quartiles compared with over 80 percent of non-Hispanic students. Spanish language background students of unspecified origin occupy an intermediate SES position with slightly over 60 percent in the top three quartiles.

School Outcomes

Hispanic students with a Spanish language background rank relatively low on all measures of school outcomes (grades, test scores and college expectations) as do Spanish language background students of unspecified origin. This is especially true for achievement test scores (about 55 percent in top three quartiles versus 75 percent for all students); but they have only slightly lower expectations to get a college degree, (about 40 percent versus slightly more than 40 percent for all students).

Non-Hispanic students with a Spanish language background and students with an "other foreign language" background rate higher on all three school outcome measures than do English language background students.

The data on Spanish language background students in table 3 reveal that while Hispanic students with a similar language background are similar to students of unspecified origin with regard to school outcomes, they differ considerably in family background characteristics and differ from non-Hispanic students in both school outcomes and family background. Further analysis on this subject will be reported only for Hispanic Spanish language background students.

RELATIVE LANGUAGE PROFICIENCY

HS&B students, who had a non-English language background, rated their ability to understand, speak, read, and write in English and in their other language.[4] Table 4 and figure 1 present percentage breakdowns of Hispanic student's comparisons of their proficiency in Spanish and English.

About half the Hispanic students with a Spanish language background considered themselves equally proficient in understanding both languages. About 40 percent rated themselves as more proficient in English, and less than 10 percent felt more proficient in understanding Spanish. The self-ratings of the sophomores and the seniors are highly similar.

Hispanic students with a Spanish language background were more proficient in English in school-related language skills (reading and writing) than in home-related skills (speaking and understanding). In writing, over two-thirds were more proficient in English than Spanish and another one-fourth were equally proficient.

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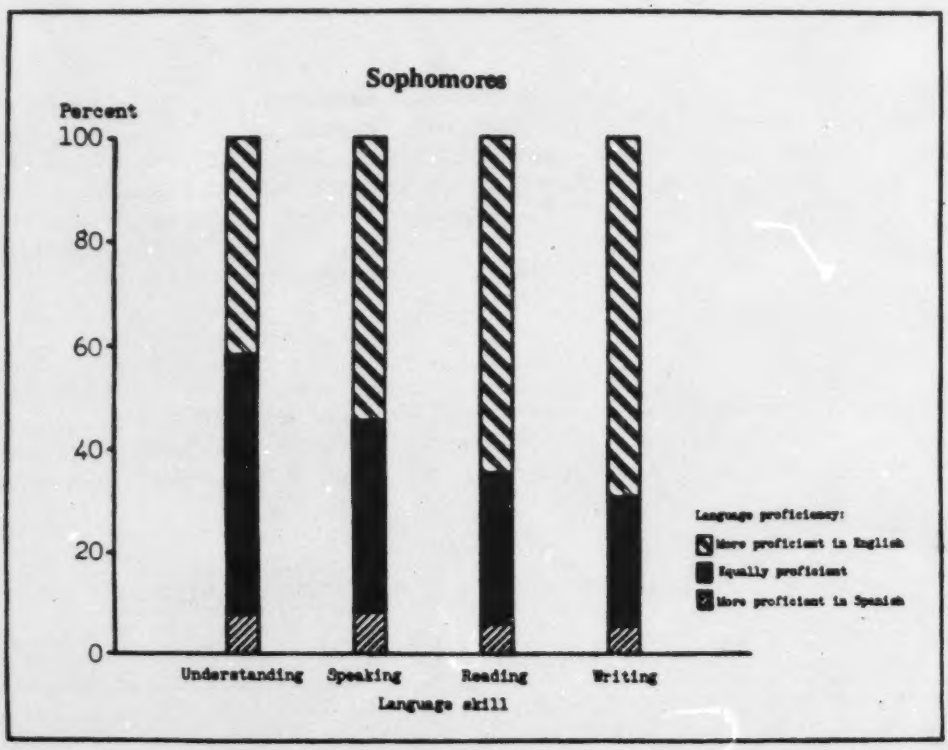
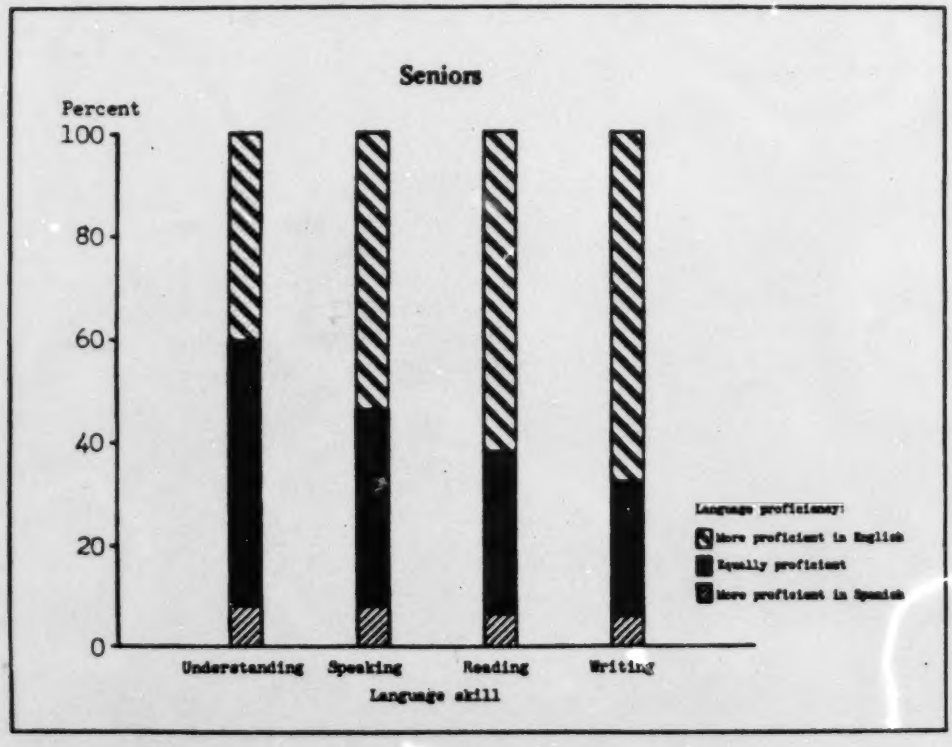
[4] Relative proficiency categories were created by comparing the student's ratings of each language skill category in English and Spanish. We assumed that students employed the same standards when assessing their proficiency in each skill category for English and Spanish.

Figure 1. Relative language proficiency (English vs. Spanish) of Hispanic students with Spanish language background: Percent of 1980 sophomores and seniors





RELATIVE LANGUAGE PROFICIENCY AND FAMILY BACKGROUND AND SCHOOL OUTCOMES

The data in table 5 compare the three relative language proficiency categories of Hispanic students with a Spanish language background with respect to family background and school outcomes.[5]

Family Background

For Hispanic students with a Spanish language background, proficiency in English is strongly related to socioeconomic status, place of birth, and whether the mother spent all of her life in the United States. Students who are more proficient in English than Spanish report the highest SES, are more likely to have been born in the U.S., and report that their mothers are more likely to have spent all of their lives in the U. S. The pattern holds for both the sophomore and senior cohorts in each language skill.

School Outcomes

Students more proficient in English than Spanish had a higher percentage in the top three quartiles of achievement test scores than did the other two categories of relative language proficiency. But no consistent relationship is found between relative language proficiency and grade average and college expectations.

RELATIVE LANGUAGE PROFICIENCY AND BILINGUAL INSTRUCTION

The final section of this bulletin examines the relationship between relative language proficiency and amount of bilingual instruction reported by the student to have been received in high school. Table 6 and figure 2 compare the percentages of students who reported receiving bilingual instruction in high school by relative language proficiency categories.[6] Again, all percentages in this section are based on Hispanic students with a Spanish language background.

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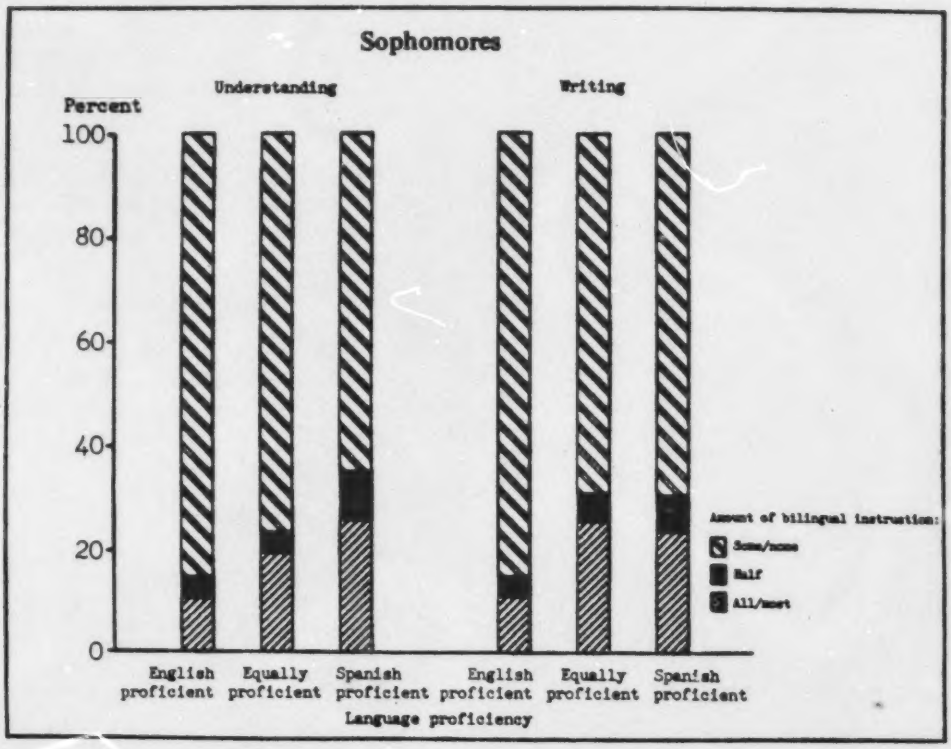
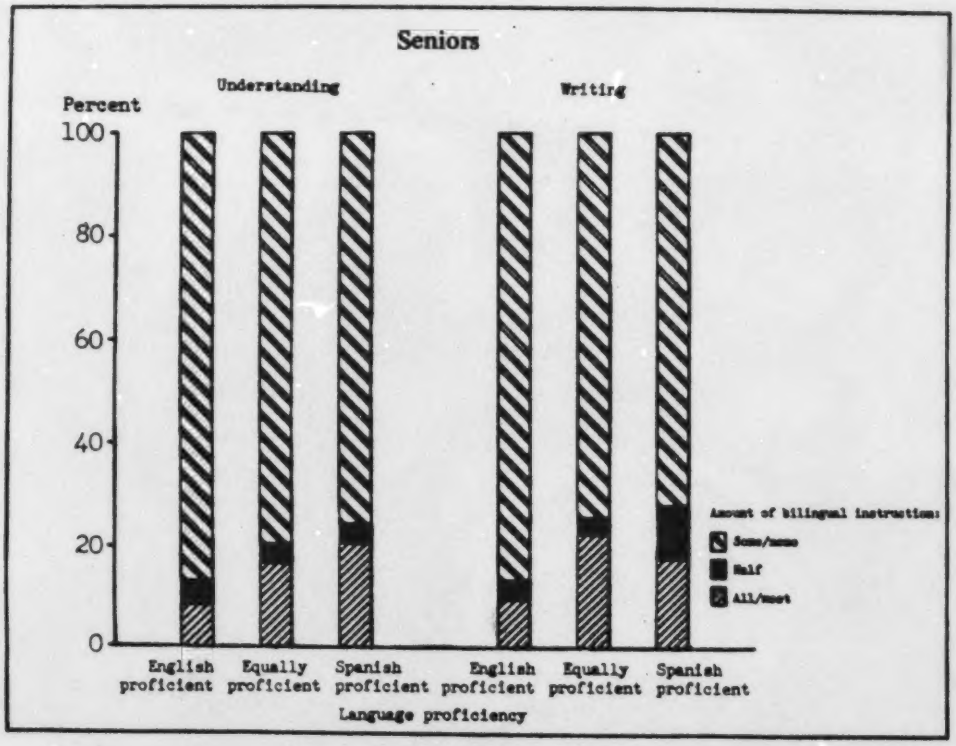
[5] Tabulations of the descriptive factors by speaking and reading are not presented to reduce the complexity of the tables. The patterns cited in the text are similar for these two omitted skill areas.

[6] As in table 5, tabulations of bilingual instruction by speaking and reading are not presented in table 6. The relationships found between speaking and reading and bilingual instruction are similar to those found for understanding and writing.

Figure 2. Amount of bilingual instruction received, by Hispanic students with Spanish language backgrounds in grades 10–12: By relative language proficiency





As might be expected, students who were more proficient in Spanish than English were more often the recipients of bilingual instruction than those who were more proficient in English. About 57 percent of the sophomores and 46 percent of the seniors who were more proficient in Spanish than English in writing had reading/writing in Spanish versus about 34 percent of sophomores and 40 percent of seniors more proficient in English. Overall, the percentage of students who had reported taking any bilingual education was highest for those more proficient in Spanish than English.

The percentage of students who reported that about half or more of their instruction had been in Spanish was about twice as high for Spanish proficient students as for English proficient students (see figure 2).

For More Information

Information about the Center's statistical program and a catalog of NCES publications may be obtained from the Statistical Information Office, National Center for Education Statistics, 400 Maryland Avenue SW. (Mail stop 1001), Washington, D.C. 20202, telephone (301) 436-7900.

Table 1. Language background of high school students by origin/descent: 1980 sophomores and seniors

Percentage distribution

Language background[2]	Total	Origin/descent[1]						
		Hispanic					Non-Hispanic	Unspecified
		Total	Mexican	Puerto Rican	Cuban	Other Latin American		
Sophomores:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Spanish	7.0	58.6	66.6	75.0	72.9	31.5	2.0	5.3
Other foreign language	8.2	2.5	1.0	3.2	1.6	5.8	8.6	9.0
English	84.8	39.0	32.4	21.8	25.5	62.7	89.4	85.7
Sample size	30,030	3,521	2,123	306	369	723	20,305	6,204
Seniors:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Spanish	5.5	63.1	72.0	79.6	79.6	38.1	1.2	4.1
Other foreign language	8.9	2.3	1.1	2.0	.7	4.9	9.1	10.2
English	85.6	34.6	26.9	18.4	19.7	57.0	89.7	85.7
Sample size	28,240	3,177	1,893	334	308	642	20,153	4,910

[1] Classification of students was based on the respondent's answer to the following question: "What is your origin or descent? (If more than one, please mark below the one you consider the most important part of your background.)" Students classified as Hispanic marked one of the four categories: Mexican, Cuban, Puerto Rican, and other Latin American. The "non-Hispanic" category is composed of students who marked one of the following: African, Alaskan, American Indian, Asian, European, Canadian, or United States. Students who marked the "Other" category, refused to answer, left the question blank, or marked more than one category were placed in the "Unspecified" category.

[2] A student was considered to have a Spanish language background if "Spanish" was answered to at least one of five language questions: first language you spoke when you were a child, other language you spoke as a child, language you usually speak now, language the people in your home usually speak, and other language spoken in the home. Students in the "other foreign language" category indicated a foreign language other than Spanish on at least one of the five questions and did not answer "Spanish" to any of the five questions. The "English" background category includes those students who answered that no language other than English was used.

Table 2. Spanish language background as a child and in high school by origin/descent: 1980 sophomores and seniors

Percentage distribution

Spanish language background	Total	Origin/descent						
		Hispanic					Non-Hispanic	Unspecifi
		Total	Mexican	Puerto Rican	Cuban	Other Latin American		
Sophomores:								
During childhood:								
Spanish was first language spoken. . .	44.1	57.7	50.8	83.8	76.5	49.5	9.0	35.2
Spanish was another language spoken. . .	23.4	22.1	24.7	12.3	14.8	25.3	24.0	27.9
High school:								
Usually speaks Spanish now.	10.6	12.4	13.6	21.7	6.7	9.9	5.5	10.0
Spanish usually spoken in home . . .	41.2	54.6	48.4	79.4	74.5	43.0	5.3	34.4
Spanish another language spoken in home.	48.5	39.9	47.5	12.3	18.8	48.8	71.8	52.7
Sample size	3,500	2,560	1,681	275	283	321	465	475
Seniors:								
During childhood:								
Spanish was first language spoken. . .	43.3	54.1	48.2	85.4	71.1	49.4	7.3	30.7
Spanish was another language spoken. . .	23.5	22.9	25.8	11.4	18.3	20.6	27.3	22.5
High school:								
Usually speaks Spanish now.	9.9	11.3	11.3	17.9	10.1	8.9	6.1	7.2
Spanish usually spoken in home . . .	39.2	49.2	44.3	87.7	60.2	42.0	4.9	28.8
Spanish another language spoken in home.	52.0	46.4	52.4	11.4	31.6	50.5	69.2	60.5
Sample size	3,081	2,462	1,563	309	270	320	290	329

Table 3. Family background, school performance, and college expectations by language background: 1980 sophomores and seniors

Percentage distribution

Variables	Total	Language background				
		Spanish			Other foreign language	English
		Hispanic	Non-Hispanic	Unspecified		
Sophomores:						
Born in U.S.	95.2	75.9	95.1	85.1	79.7	97.8
Mother spent all life in U.S.	86.4	49.4	76.2	61.7	58.2	91.6
In top 3 quartiles of SES	72.5	42.2	82.5	61.0	76.8	73.7
High school grade avg. is B or better. .	45.1	36.8	55.0	33.8	54.4	44.5
Achievement in top 3 quartiles (test scores)	75.0	58.7	80.8	53.7	81.0	73.3
Expect to get at least college degree	40.6	38.6	54.6	38.6	51.6	39.4
Sample size	30,030	2,560	465	475	2,399	24,131
Seniors:						
Born in U.S.	95.4	77.7	95.8	80.7	79.1	98.0
Mother spent all life in U.S.	88.8	55.2	79.8	65.9	58.3	93.8
In top 3 quartiles of SES	72.6	42.6	84.2	63.8	74.8	73.6
High school grade avg. is B or better. .	53.4	40.8	54.2	45.2	58.6	53.5
Achievement in top 3 quartiles (test scores)	75.1	55.0	76.2	55.5	79.8	75.6
Expect to get at least college degree	45.5	42.0	55.9	38.3	55.8	44.6
Sample size	28,240	2,462	290	329	2,323	22,836

Table 4. Relative language proficiency [1] (English vs. Spanish) of Hispanic students with Spanish language background: 1980 sophomores and seniors

Percentage distribution

Language proficiency	Language skills			
	Understanding	Speaking	Reading	Writing
Sophomores (n = 2560)				
Total.	100.0	100.0	100.0	100.0
More proficient in English .	41.7	54.3	64.3	68.9
Equally proficiency.	50.5	37.4	29.8	25.5
More proficient in Spanish .	7.8	8.3	5.9	5.6
Seniors (n = 2462)				
Total.	100.0	100.0	100.0	100.0
More proficient in English .	40.3	53.6	61.8	67.4
Equally proficiency.	51.7	38.4	31.8	26.7
More proficient in Spanish .	8.0	8.0	6.5	5.9

[1]Students were asked to respond to two sets of four questions on their proficiency in English and in Spanish. They rated their ability to understand, speak, read, and write on a four-point scale from "very good" to "not at all". Relative proficiency categories were created by comparing the student's rating of each language skill category in English and in Spanish. It is assumed that students employed the same standards when assessing their proficiency in the two languages.

Table 5. Family background, nature of language background, school performance, and college expectations by relative language proficiency of Hispanic students with Spanish language background: 1980 sophomores and seniors

Percentage distribution

Variables	Relative language proficiency					
	Understanding			Writing		
	More proficient in English	Equally proficient	More proficient in Spanish	More proficient in English	Equally proficient	More proficient in Spanish
Sophomores:						
Born in U.S.	88.9	68.9	45.4	83.5	60.6	39.2
Mother spent all life in U.S.	67.7	37.1	23.6	55.6	37.2	16.6
Spanish was first language spoken.	35.8	71.8	94.1	50.4	73.6	92.6
Spanish usually spoken in home	31.0	70.5	90.8	48.9	67.7	89.8
In top 3 quartiles of SES	51.1	38.5	14.2	43.4	41.4	22.5
High school grade avg. is B or better.	37.8	35.2	39.8	36.6	38.7	32.0
Achievement in top 3 quartiles (test scores).	67.9	56.1	32.6	63.5	52.7	48.0
Expect to get at least college degree	41.8	38.3	27.2	38.7	40.9	35.6
Sample size	983	1,366	211	1,702	727	131
Seniors:						
Born in U.S.	93.8	70.5	38.9	83.5	60.6	39.2
Mother spent all life in U.S.	80.2	40.3	19.7	67.3	30.8	12.2
Spanish was first language spoken.	26.4	70.8	91.9	41.8	81.2	88.6
Spanish usually spoken in home	24.3	63.6	85.2	38.3	71.1	86.4
In top 3 quartiles of SES	52.7	36.7	25.4	45.1	36.9	29.1
High school grade avg. is B or better.	40.5	42.8	35.7	40.4	45.7	38.0
Achievement in top 3 quartiles (test scores).	59.1	53.3	36.8	66.6	44.7	33.1
Expect to get at least college degree	39.0	46.4	34.1	42.3	43.0	50.8
Sample size	846	1,407	209	1,586	719	157

Table 6. Bilingual instruction received in grades 10-12 by relative language proficiency of Hispanic students with Spanish language background: 1980 sophomores and seniors

Percentage distribution

Type of instruction	Relative language proficiency					
	Understanding			Writing		
	More proficient in English	Equally proficient	More proficient in Spanish	More proficient in English	Equally proficient	More proficient in Spanish
Sophomores:						
English for non-English speakers	14.1	16.4	28.3	13.2	21.9	35.2
Reading/writing in Spanish	34.8	39.6	52.3	34.2	47.0	57.2
Other subject taught in Spanish	13.3	17.9	32.2	12.8	24.5	31.4
Taken any of the above bilingual instruction	39.7	45.1	59.8	38.8	53.0	63.3
Proportion of teaching done in Spanish						
All/most	10.6	19.6	25.9	11.0	25.8	23.8
Half	4.2	4.0	9.3	4.1	5.4	7.0
Some/none	85.2	76.4	64.8	85.0	68.7	69.3
Sample size	983	1,366	211	1,702	727	131
Seniors:						
English for non-English speakers	13.6	17.3	43.1	13.4	21.3	44.7
Reading/writing in Spanish	40.5	44.9	43.8	40.4	48.1	45.8
Other subject taught in Spanish	10.1	16.4	24.1	10.6	20.3	23.1
Taken any of the above bilingual instruction	42.9	50.2	60.5	44.4	53.5	63.1
Proportion of teaching done in Spanish						
All/most	8.3	16.7	20.7	9.5	22.6	17.8
Half	4.8	3.8	3.8	3.9	3.3	10.5
Some/none	86.9	79.5	75.5	86.6	74.1	71.7
Sample size	846	1,407	209	1,586	719	157

TECHNICAL NOTES

Ethnicity and Language Classifications

Hispanics (7 percent of sophomore and 8 percent of senior populations) included all students who indicated on a questionnaire that their "origin or descent" was Mexican, Cuban, Puerto Rican, or Other Latin American.[7] **Non-Hispanics** (73 percent of sophomore and 71 percent of senior populations) were those who marked any of the 26 non-Hispanic origins listed in the questionnaire. **Unspecified** (20 percent of sophomore and 21 percent of senior populations) consisted of those students who wrote in an origin not listed, marked more than one origin, or omitted the question.

Language backgrounds were classified as: Spanish, Other Foreign Language, or English. Respondents were considered to have a "Spanish language background" (7 percent for sophomores and 5 percent for seniors) if they answered "Spanish" to any of the five questions concerning: first language spoken as a child, other language spoken as a child, the language currently spoken in the student's home, other language spoken in the home, and the language which the respondent usually speaks now. The "Other Foreign Language" category (8 percent for sophomores and 9 percent for seniors) included all students who did not answer "Spanish" to any of the five questions but did mark another foreign language to at least one. The "English" category (85 percent for sophomores and 86 percent for seniors) was assigned to all students not falling into either of the two previous categories.

Limitations of the Data

The percentages in this bulletin are estimates derived from a sample survey. Two types of errors are possible in such estimates -- sampling and non-sampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, respondent's inability or unwillingness to provide correct information, mistakes in recording or coding data, and other errors of collection, response, processing, coverage, and estimation for missing data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

One source of non-sampling error is non-response bias. Students who were selected to participate in the survey but refused to do so may have different characteristics than those who did participate. Participation rates for Hispanics (86 percent for sophomores and 83 percent for seniors) were similar to those for the entire sample (88 percent for sophomores and 84 percent for seniors).

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[7] All percentages mentioned in this bulletin are weighted population estimates. These estimates are derived using the student weights that reflect the particular sample design of High School and Beyond.

The particular sample used in the HS&B survey is only one of a large number of possible samples of the same size that could have been selected using the same survey design. Estimates derived from the different samples would differ from each other. The standard error of an estimate is a measure of the variation among the estimates from the possible samples. The sample estimate, together with an estimate of its standard error, permits us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples.

The standard error (s.e.) of a percentage(p) is approximately:

$$s.e.(p) = 1.6 \sqrt{p(100 - p)/n},$$

where n is the sample size and 1.6 is a factor used to adjust for the particular sample design used in HS&B.

In comparing the difference between two percentages, the standard error of the difference may be estimated by taking the square root of the sum of the squared standard errors of the two percentages:

$$s.e.(p_1-p_2) = \sqrt{(s.e.(p_1))^2 + (s.e(p_2))^2}$$

For example, if we assume that the difference between p_1 and p_2 is 15 percentage points and that the standard error of the difference is 2.5, then the sampling error (95 chances in 100) of the difference is double the standard error (2 x 2.5 = 5), and the 95 percent confidence interval for the difference (15) is 15 ± 5, or 10 to 20 percentage points.